

ABSTRACT

A system is disclosed for using camera attitude sensors with a camera. A camera assembly includes a tripod base, a tripod head interface mounted on the tripod base, a tripod head mounted on the tripod head interface and a camera mounted on the tripod head. The tripod head enables the camera to pan and tilt.

5 The system also includes a first optical encoder for detecting the amount that the camera has been panned and a second optical encoder for detecting the amount that the camera has been tilted. Two inclinometers are mounted on the tripod head interface to measure attitude of the tripod head. Two gyroscopes ("gyros") are mounted on the camera assembly. Data from the encoders, gyros and inclinometers  
10 are packaged and sent to graphics production equipment to be used for enhancing video captured by the camera.